Docket No.: NISSL-2 Appl. No.: 10/596,622

AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

1.-8. (Canceled)

9. (Currently amended) A stent for application in a body vessel, comprising a tubular support frame <u>defining a longitudinal axis and expandable from an initial state to a support state</u>, said support frame including made of

plural ring segments[[,]] which are arranged sequentially in an axial a direction of a longitudinal axis and formed by struts having a wavy configuration and adjoining each other continuously via transitions, with each strut defined by a longitudinal strut axis and having a width which as measured transversely to the longitudinal strut axis increases from midsection in a direction to the transitions, said support frame further including and

first and second tie bars for connecting neighboring ring segments, each of the tie bars including an arm extending in circumferential direction of the support frame and terminating on both ends in axial sections of wavy configuration for connection of the first and second tie bars to the transitions, with the axial sections of the first tie bars having a width which as measured transversely to the longitudinal axis increases from the arm in a direction to the transitions,

wherein each of the first tie bars extends from a bottom of two interconnected struts of a ring segment to an opposing bottom of two interconnected struts of an adjacent ring segment, with the bottoms disposed offset to another,

wherein each of the second tie bars extends from a tip of two interconnected struts of a ring segment to an opposing tip of two interconnected struts of an adjacent ring segment, with the tips disposed offset to one another, and

wherein in support state of the support frame the first bars are sized to extend substantially in a direction of the longitudinal axis, and the second tie bars are sized to substantially extend in a direction transversely to the

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longitudinal axis the axial sections of the first tie bars define a longitudinal axis and have a width which as measured transversely to the longitudinal axis increases from the arm in a direction to the transitions.

- (Previously presented) The stent of claim 9, wherein the arms are arranged between adjacent axially spaced ring segments.
- 11. (Canceled)
- 12. (Canceled)
- 13. (Previously presented) The stent of claim 9, wherein the first tie bars and the second tie bars are arranged between the ring segments at an offset relationship in the circumferential direction of the support frame.
- 14. (Previously presented) The stent of claim 9, wherein each third of the transitions has an end formed with a widened head which protrudes in the axial direction beyond neighboring ones of the transitions.
- 15. (Currently amended) The stent of claim 14, wherein the widened head is connected to a connection point formed by one of the first tie bars and two corresponding interconnected struts of a ring segment and faces away in an axial direction from the one first tie bar.
- 16. (Previously presented) The stent of claim 9, wherein an increase in width of the strut depends on a wave radius of the strut.
- 17. (Previously presented) The stent of claim 16, wherein a ratio of the wave radius to the width of the strut changes from midsection toward ends of the strut is 10:1 to 15:1.

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18. (Previously presented) The stent of claim 9, wherein a ratio of a wave radius of the axial sections to a width of the axial sections changes from the arm to the ends in a range between 12:1 and 20:1.